

Chapter Five
Discussions, Conclusions and
Recommendation

5-1 Discussion

5-2 Conclusions

5-3 Recommendations

5-1: Discussions:

Data collected from many resources in the university that because one must be careful to know what is right, so the researcher compares the data by that in archives and that in students' deanery. The researcher gives more efforts to estimate the missing data by the average of the ratios. Data collected had been analyzed and set up in many tables, and from that the matrix of students' numbers in each level has been created.

The data supports the hypothesis of homogeneous transition probability matrix. The estimated values for this matrix show the chance of student passing his end of the year examination improves as he moves for one level to the next while his chances of repeating or withdrawing decreases. This suggests that the educational process under study does its "selection" mainly in state one. Students that survive state one appear to be academically fit as they highly likely to graduate from the system eventually.

If we have a look to the model (t.p.m) for the six departments we note that the probability of success is increasing where the student transfer to the next level, e.g. in Accounting department the probability in state (level) one is 0.261 , and 0.734 is the probability that the students transfer to second level. Also in state two the probabilities are 0.226 and 0.772 . This notice appeared for all other departments. This policy may be due to the university in order to increase the number of graduates to fill the gap in society.

Also if we a have a look to that probability of graduates in state (5) (out of the system) it appears like this [0.702 , 0.802 , 0.833 , 0.886 , 0.923 , 0.812] for the six departments. The probabilities indicate that more than eighty percent of students will be graduates.

After four years (P^4) we note that the probabilities are:

- Account department is 0.984
- Business Administration department is 0.998
- Economic department is 0.998
- Political Sciences department is 0.995
- Insurance department is 1
- Social Studies department is 0.996

These probabilities means ninety percent of the students will be graduates, but the society seeks for more graduates who know the knowledge of insurance and this may be the concept of 100% graduates in Insurance department.

5-2: conclusions:

- 1- From table (4-27) which represents the number of graduate students $G_i(t)$ and the graduate students who passed all four years without delay, i.e. $G'_i(t)$, and table (4-28) which explains the ratio of the graduate students who passed their four years duration without delay, we conclude that the first department who has the highest ratio is Insurance department, and this seems reasonable because the graduates from this field are fewer in number compared to real need in the society. The second department is Economics department, the ratio of graduation is (47%).
- 2- Ratio of graduation in all departments signifies that there is an overstay of the students. These ratios are: Accounting (72%), Business Administration (74%), Economics (53%), Political Sciences (56%), Insurance (50%), and Social Studies (60%).

3- The reasons verify the delay may be due to:

- The inadequate resources of families for their son's education lead the students to spare much time for seeking jobs instead of dedicating to study.
- Some of students repeated of delayed the exams to have more time period in the faculty (overstaying) due to political climate or other reasons.
- Transition of students from faculty to other faculties or changing their university.

4- It is clear that from table (4-29) the loss students is nearly the same among levels, but it differs from department to another. Political Sciences is the first department who has more loss students, the second department is Insurance. This variation in loss students may be due to the transferring some students to other institutes at the first year of study for different reasons.

5- By applying the model (t.p.m) we can say this model of M.C. is so efficient to estimate graduates with high probability and the graduates compared as before in the year (2001-2002) is nearly the same, and the differences which appear based to three following methods of admissions:

- 1- Admission Committee.
- 2- Private Admission.
- 3- Upgrading.

The researcher deals with the admission committee only and this model of M.C. achieved the goals.

5-3: Recommendations:

The following comprise the recommendation as drawn from this study:

- 1- When we apply the statistical and mathematical models in education planning like markov chain, we get an optimal planning policy.
- 2- We recommend to done like this study to contains more years, this will lead to more accurate results.
- 3- This model can be applied to other education data like teachers' numbers, teachers' scientific degrees, teachers budget, teachers' numbers in each department.
- 4- The less number of graduates of those who intake he department without delaying, appears in Accounting and Business Administration departments, so we recommend to gives more importance for graduation in these departments.
- 5- It is necessary for he faculties and university administration to concentrate more attention to solving the departments problems in order to ameliorate the efficiency of their teaching that should eventually reflects positively performance and reducing the ratio of students who delaying in their study.
- 6- It is important to orient the students at the beginning about the properties and specialization of the department that they may join.
- 7- The government and authorities should plan for the future working opportunities for graduates of those departments especially for students whom get high graduate percentages, this should give a positive and strong incentive for the students and may negate the delaying and overstaying of the university study